

# DWR Climate News Digest

April 2016

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the [Climate News Archive](#)]

## **Reports**

### **[The Impact of Climate Change on Human Health](#)**

[US Global Change Research Program – April 2016]

## **Published Literature**

### **[Trends in atmospheric patterns conducive to seasonal temperature and precipitation extremes](#)**

**[in California](#)** [Science Advances/AAAS – April 2016] *“Collectively, our empirical findings suggest that the frequency of atmospheric conditions like those during California’s most severely dry and hot years has increased in recent decades, but not necessarily at the expense of patterns associated with extremely wet years.”*

### **[‘Climate value at risk’ of global financial assets](#)** [Nature Climate Change – April 4, 2016]

*“Limiting warming to no more than 2°C makes financial sense to risk-neutral investors – and even more so to the risk averse”*

### **[Observational constraints on mixed-phase clouds imply higher climate sensitivity](#)**

[Science/AAAS – April 8, 2016] *(For decades, Equilibrium Climate Sensitivity (ECS) has been estimated to be between 2.0° and 4.6°C, but the authors conclude that ECS could be between 5.0° and 5.3°C – higher than suggested by most climate models)*

## **Agriculture/Food Production**

### **[Farmland could play key role in tackling climate change](#)** [Climate Central – April 6, 2016]

[To help curb climate change, stop wasting food](#) [Climate Central – April 10, 2016]

[Tea could be in jeopardy from climate change, study says](#) [Weather.com – April 25, 2016]

### **General Water Management**

[A California farmer who is preparing for climate change](#) [Desert Sun – April 11, 2016] (“As farmers, we need to be aware of the changes and shift our selections to varieties that are more tolerant to warmer temperatures.”)

[How climate change dries up mountain streams](#) [Science Daily – April 12, 2016]

### **Extreme Weather Events**

[NASA predicts megadroughts are coming to the American west](#)

[Who What Why – April 30, 2016]

### **Sea-level Rise and other Ocean Impacts**

[NASA’s new sea level site puts climate change papers, data, and tools online](#)

[Tech Crunch – April 4, 2016]

[Around the pier: Leading ocean scientists recommend action plan to combat changes to west coast seawater chemistry](#) [Scripps Institution of Oceanography – April 6, 2016]

[Climate change is ‘devastating’ the Great Barrier Reef](#) [Climate Central – April 28, 2016]

### **Human Health Impacts**

[Fact Sheet: What climate change means for your health and family](#)

[The White House – April 4, 2016]

[The impact of climate change on public health, in four infographics](#)

[Clean Technica – April 11, 2016]

[Climate change to widen range of disease-carrying mosquitoes, says study](#)

[Carbon Brief – April 28, 2016]

### **Tribal Impacts & Traditional Ecological Knowledge**

[Amazon peoples and climate change](#) [Intercontinental Cry – April 10, 2016] (“In this 22-minute video, you will hear Indigenous Peoples from across the Peruvian Amazon describe how climate change is affecting them and the biodiversity their cultures and communities depend on.”)

[Impact of climate change on Indigenous communities](#) [ABC.Net.Au – April 13, 2016]

[What 90,000 indigenous people have to say about climate change](#) [Fusion – May 2, 2016]

### **Wildlife and Ecosystem Impacts**

[Biodiversity loss: An existential risk comparable to climate change](#)

[Bulletin of the Atomic Scientists – April 11, 2016]

[Slow worms react quickly to climate change](#) [Science Daily – April 27, 2016]

### **Greenhouse Gas Mitigation**

[Reducing food waste on global scale may combat climate change, study says](#)

[Headlines and Global News – April 7, 2016]

[Role of animals in mitigating climate change varies across tropical forests](#)

[Science Daily – April 25, 2016]

### **Climate Adaptation**

[Building resilience to climate change requires investment in nature](#)

[Center for American Progress – April 8, 2016] (*“As biodiversity and the production of ecosystem services decline, the costs from asset losses, declines in human well-being, and expenditures on artificial replacements rise, exerting a drag on economies large and small.”*)

### **Legislative Updates**

[Federal Court rules on climate change in favor of today’s children](#) [Forbes – April 10, 2016]

*“...the judge unequivocally rejected all arguments raised by the Federal Government and the Fossil Fuel Industry in their Motions to Dismiss that sought to deny the youth their fundamental rights under the constitution and public trust doctrine, and claimed that the government has no duty to protect essential natural resources, such as air and oceans”*)

### **International Planning**

[This graph shows nations are addressing climate change without tanking their economies](#)

[Vice News – April 6, 2016]

[Save the Children: Ethiopia ‘deeply affected’ by climate change](#)

[Climate Home – April 11, 2016]

[Climate change is taking the spotlight in Australia's election](#) [Climate Progress – April 27, 2016]

### **Climate Change Modeling**

[Climate models may overstate clouds' cooling power, research says](#) [New York Times – April 7, 2016]

[Today's global climate models do not capture the effects of climate change on islands' aridity](#)  
[PhysOrg – April 11, 2016]

### **Communicating Climate Change**

[One fact about climate change that's worth repeating](#) [Think Progress – April 6, 2016] (*"The overwhelming majority of climate scientists – over 97 percent – understand that humans are the primary cause of climate change. This is one of the central facts about human-caused climate change that any climate communicator needs to keep repeating, for several reasons"*)

### **Scientists just confirmed the scientific consensus on climate change**

[Think Progress – April 13, 2016] (*"The study...brought together 16 scientists, including seven authors of consensus studies that documented similar conclusions over the years despite varying research approaches...authors concluded that scientific agreement on human-caused climate change is 'robust' with a range of 90 to 100 percent, depending on the question and methodology"*)

### **BLOGS/Commentary**

Joe Romm on "[One fact about climate change that's worth repeating](#)"  
[Think Progress – April 6, 2016]

Jackie Biskupski and Cindy Lerner on "[Cities are the front lines for action on climate change](#)"  
[Time – April 6, 2016] (*Mayors of Salt Lake City, UT and Pinecrest, FL voice support for the Clean Power Plan*)

James Dyke on "[Can game theory help solve the problem of climate change?](#)"  
[The Guardian – April 13, 2016]

Fred Pearce on "[A new politics of climate change could save the world](#)"  
[New Scientist – April 27, 2016]

## **Additional Items of Interest**

### **Climate change could wipe out assets worth more than the economy of Brazil**

[Forbes – April 4, 2016]

**NASA is facing a climate change countdown** [New York Times – April 4, 2016] *“Coastal floods that might now occur once every 10 years could happen twice as often at Johnson, twice to three times as often at Kennedy and 10 times more often at Ames”*

**Climate change may be causing Earth’s poles to shift** [Huffington Post – April 11, 2016]

### **CalPERS pushes Exxon to outline potential effects of climate change initiatives**

[Wall Street Journal – April 12, 2016] *“Investors holding more than \$5 billion in Exxon Mobil Corp. shares are urging the company to disclose how its business would be affected by the global push to slow warming atmospheric temperatures”*

**Greenland sees record-smashing early ice sheet melt** [Climate Home – April 12, 2016]

**Navy to require climate change reporting from vendors** [ABC News – April 12, 2016]

### **Oil industry know of ‘serious’ climate concerns more than 45 years ago**

[The Guardian – April 13, 2016] *“Researchers warned the American Petroleum Institute in 1968 that the release of carbon dioxide from fossil fuels could lead to ‘worldwide environmental changes’”*

**Exxon fires back at climate change probe** [Wall Street Journal – April 13, 2016]

### **The data says climate change could cost investors trillions**

[Harvard Business Review – April 14, 2016]

**Peabody bankruptcy offers stark warning to oil and gas groups of risks of ignoring climate change** [Forbes – April 14, 2016]

### **We just crushed the global record for hottest start of any year**

[Think Progress – April 15, 2016]

### **Ancient volcanoes could be key to predicting the impact of climate change**

[PhysOrg – April 15, 2016]

**6 climate-change documentaries to watch on Earth Day** [Vogue – April 22, 2016]

### **World governments vow to end fossil fuel era at UN climate signing ceremony**

[The Guardian – April 22, 2016]

[Did climate change cause these ancient civilizations to collapse?](#) [PRI – April 24, 2016]

[Climate change affecting Army training](#) [US Army – April 27, 2016] (According to Richard G.

*Kidd IV, deputy assistant secretary of the Army for energy and sustainability, “the effects of climate change...such as rising sea levels, or scarcity of fresh water, for instance, can overwhelm the capacity of government to provide the services it is supposed to, and that makes for failed states. Areas with failed states, or other ‘ungoverned areas’...leave a vacuum that is ripe for takeover by terrorists.”)*

[Climate change could threaten trillions of dollars in financial assets, a new study reports](#)

[PRI – April 28, 2016] (Research from the London School of Economics estimates financial assets worldwide are presently overvalued by anywhere between \$2.5 trillion to \$24 trillion, and the markets could lose that overnight if investors ‘wake up to the risks of climate change’)

### **Images to Ponder**

**Among climate experts, the rate of agreement on human-caused climate change is between 90 to 100 percent**



Image credit: <http://thinkprogress.org/climate/2016/04/13/3769104/climate-scientific-consensus-real/>

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